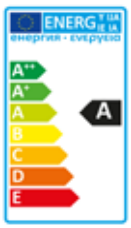
# E-CORE AR111 50W
# E-CORE AR111 75W

The new AR111 pin-base lamps are in a class of their own in the low-voltage sector: pure luminosity for downlights, gimbal and track lights. Their potential for savings is also as eye catching as it is impressive.

**Application:**

- Architectural lighting
- Shop and retail lighting
- Hospitality lighting

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Leading Innovation

# Product details

- G53 base
- Mercury free
- Instant light
- Low UV radiation
- Low heat radiation
- Very safe by operating at 12 V AC
- Life time 40,000 hours
- Reduction of energy consumption of up to 80 %
- Good illumination thanks to precisely focussed light

# Optical parameters

| MODEL NAME | E-CORE AR111 50W EQUIV. | | |
|---|---|---|---|
| Product code | LDREU001A27MA0 | LDREU001A30MA0 | LDREU001A40MA0 |
| Luminous flux | 600 lm | 640 lm | 690 lm |
| Colour description | Warm white | Warm white | Neutral white |
| Colour temperature | **2700 K** | **3000 K** | **4000 K** |
| Colour rendering index | 80 Ra | 80 Ra | 80 Ra |
| Beam angle | 24° | 24° | 24° |
| Luminous intensity | 3,400 cd | 3,600 cd | 3,800 cd |
| Lamp efficacy | 57.1 lm/W | 61.0 lm/W | 65.7 lm/W |
| Energy class | A | A | A |
| Weighted energy consumption | 12 kWh / 1000 h | 12 kWh / 1000 h | 12 kWh / 1000 h |

| MODEL NAME | E-CORE AR111 50W EQUIV. | | |
|---|---|---|---|
| Product code | LDREU001A27WA0 | LDREU001A30WA0 | LDREU001A40WA0 |
| Luminous flux | 600 lm | 640 lm | 690 lm |
| Colour description | Warm white | Warm white | Neutral white |
| Colour temperature | **2700 K** | **3000 K** | **4000 K** |
| Colour rendering index | 80 Ra | 80 Ra | 80 Ra |
| Beam angle | 40° | 40° | 40° |
| Luminous intensity | 1,200 cd | 1,300 cd | 1,300 cd |
| Lamp efficacy | 57.1 lm/W | 61.0 lm/W | 65.7 lm/W |
| Energy class | A | A | A |
| Weighted energy consumption | 12 kWh / 1000 h | 12 kWh / 1000 h | 12 kWh / 1000 h |

# Optical parameters

| MODEL NAME | E-CORE AR111 75W EQUIV. | | |
|---|---|---|---|
| Product code | LDREU002A27NA0 | LDREU002A30NA0 | LDREU002A40NA0 |
| Luminous flux | 810 lm | 860 lm | 920 lm |
| Colour description | Warm white | Warm white | Neutral white |
| Colour temperature | **2700 K** | **3000 K** | **4000 K** |
| Colour rendering index | 80 Ra | 80 Ra | 80 Ra |
| Beam angle | 8° | 8° | 8° |
| Luminous intensity | 16,000 cd | 16,700 cd | 17,900 cd |
| Lamp efficacy | 55.9 lm/W | 59.3 lm/W | 63.4 lm/W |
| Energy class | A | A | A |
| Weighted energy consumption | 16 kWh / 1000 h | 16 kWh / 1000 h | 16 kWh / 1000 h |

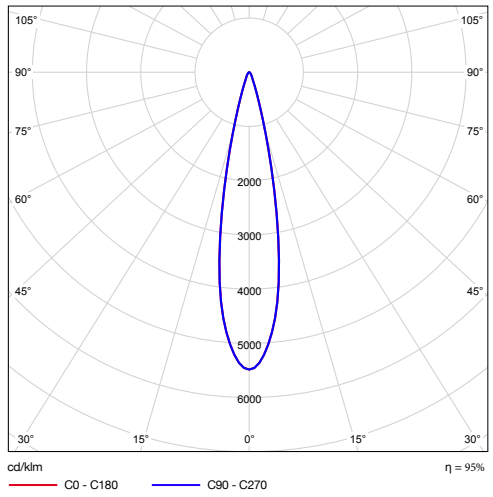
| MODEL NAME | E-CORE AR111 75W EQUIV. | | |
|---|---|---|---|
| Product code | LDREU002A27MA0 | LDREU002A30MA0 | LDREU002A40MA0 |
| Luminous flux | 810 lm | 860 lm | 920 lm |
| Colour description | Warm white | Warm white | Neutral white |
| Colour temperature | **2700 K** | **3000 K** | **4000 K** |
| Colour rendering index | 80 Ra | 80 Ra | 80 Ra |
| Beam angle | 24° | 24° | 24° |
| Luminous intensity | 4,500 cd | 4,700 cd | 5,000 cd |
| Lamp efficacy | 55.9 lm/W | 59.3 lm/W | 63.4 lm/W |
| Energy class | A | A | A |
| Weighted energy consumption | 16 kWh / 1000 h | 16 kWh / 1000 h | 16 kWh / 1000 h |

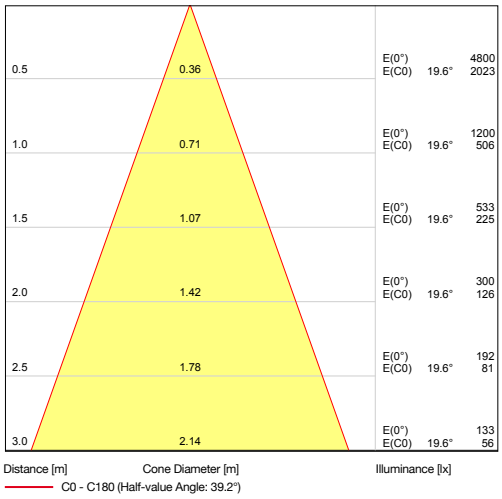
| MODEL NAME | E-CORE AR111 75W EQUIV. | | |
|---|---|---|---|
| Product code | LDREU002A27WA0 | LDREU002A30WA0 | LDREU002A40WA0 |
| Luminous flux | 810 lm | 860 lm | 920 lm |
| Colour description | Warm white | Warm white | Neutral white |
| Colour temperature | **2700 K** | **2700 K** | **4000 K** |
| Colour rendering index | 80 Ra | 80 Ra | 80 Ra |
| Beam angle | 40° | 40° | 40° |
| Luminous intensity | 1,600 cd | 1,700 cd | 1,800 cd |
| Lamp efficacy | 55.9 lm/W | 59.3 lm/W | 63.4 lm/W |
| Energy class | A | A | A |
| Weighted energy consumption | 16 kWh / 1000 h | 16 kWh / 1000 h | 16 kWh / 1000 h |

# Optical parameters

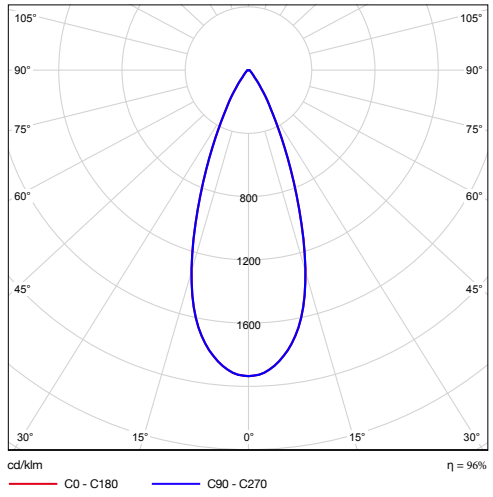
| POLAR CANDELA DISTRIBUTION | ILLUMINANCE |
|---|---|

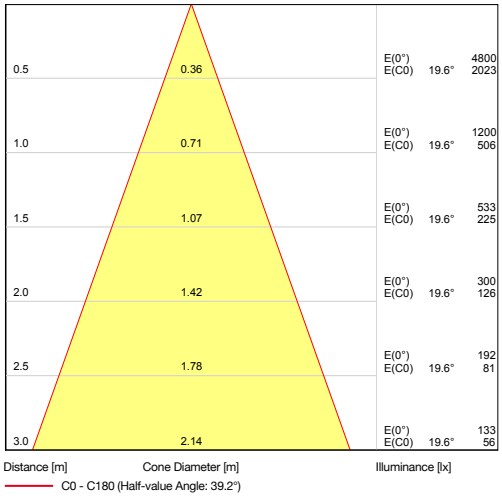
LDREU001A27MA0 / LDREU001A30MA0 / LDREU001A40MA0



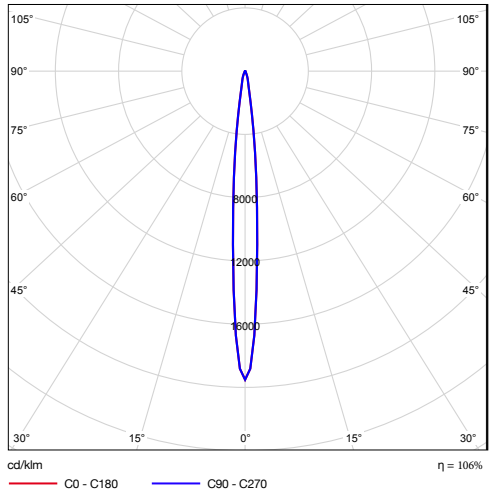



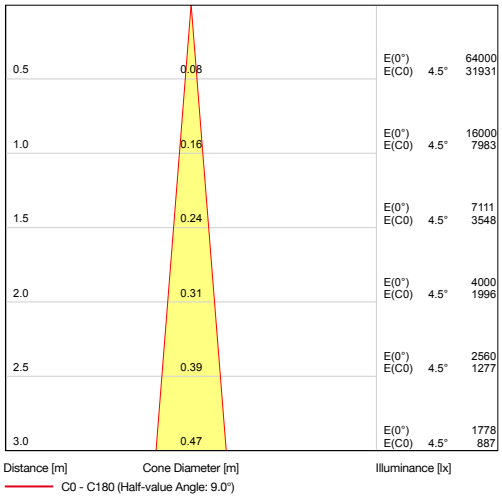

LDREU001A27WA0 / LDREU001A30WA0 / LDREU001A40WA0




LDREU002A27NA0 / LDREU002A30NA0 / LDREU002A40NA0

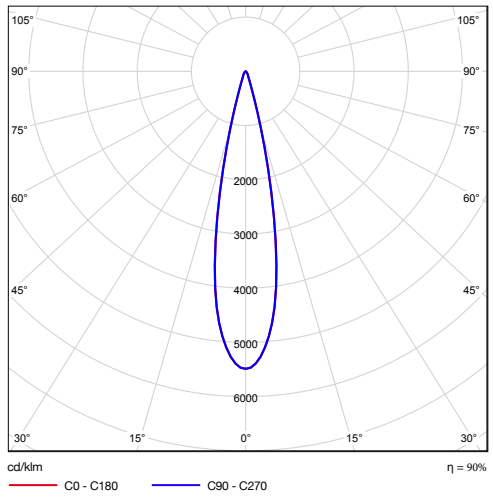


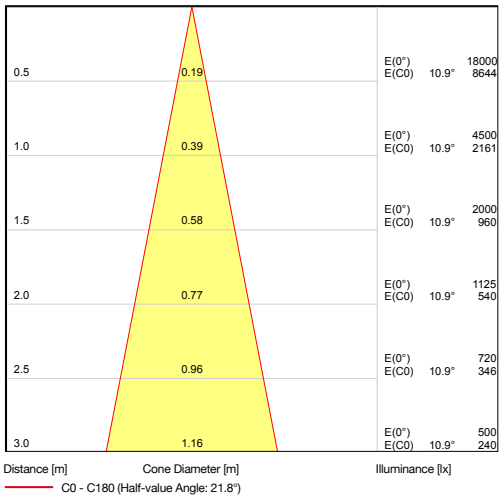



# Optical parameters

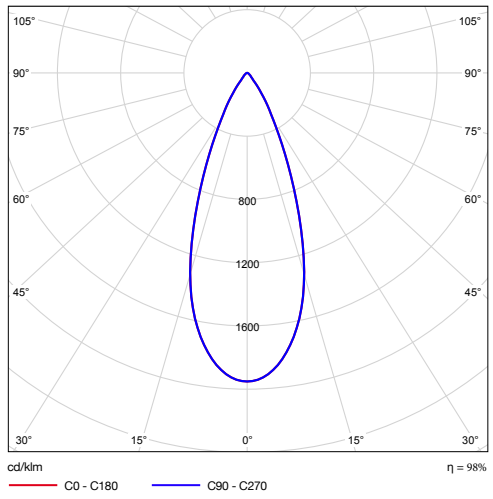
| POLAR CANDELA DISTRIBUTION | ILLUMINANCE |
|---|---|

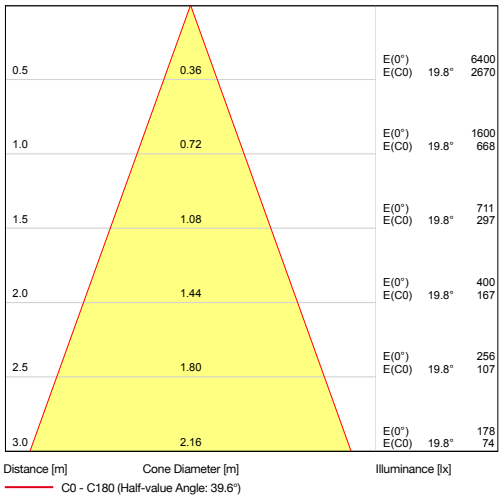
LDREU002A27MA0 / LDREU002A30MA0 / LDREU002A40MA0




LDREU002A27WA0 / LDREU002A30WA0 / LDREU002A40WA0



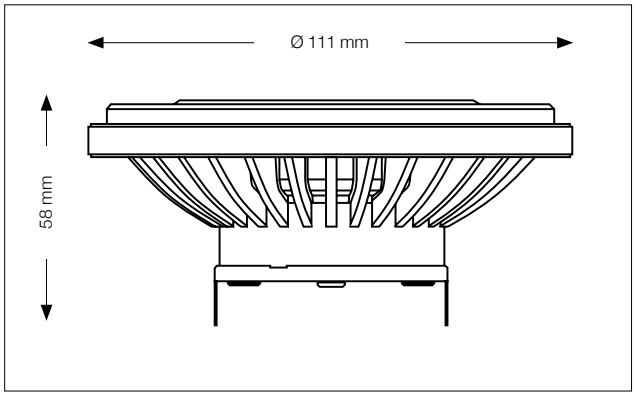

# Electrical parameters

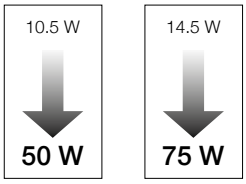
| MODEL NAME | E-CORE AR111 50W | E-CORE AR111 75W |
|---|---|---|
| Rated voltage | 12 V | 12 V |
| Rated wattage | 10.5 W | 14.5 W |
| Frequency | 50 / 60 Hz | 50 / 60 Hz |
| Rated input current | 1,1 A | 1,75 A |
| Power factor | 0.79 | 0.69 |
| Operating temperature | + 5 °C / + 40 °C | + 5 °C / + 40 °C |
| Switching cycles | >15,000 | >15,000 |
| Rated lifetime | 40,000 h | 40,000 h |
| Lumen maintenance | 70% at the rated lamp lifetime | 70% at the rated lamp lifetime |
| Dimming | No | No |

# Mechanical parameters

| MODEL NAME | E-CORE AR111 50W | E-CORE AR111 75W |
|---|---|---|
| Overall length | 58 mm | 58 mm |
| Diameter | 111 mm | 111 mm |
| Net weight | 250 g | 260 g |
| Cap | G53 | G53 |

# Drawings




According to
ErP 1194/2012

# 12V AC Drivers

For driving the E-CORE lamps a 12 V AC driver is necessary. Not every market offered driver is compatible with theses lamps. A list of recommended drivers and conditions of use can be found on our website www.toshiba.eu/lighting.

| RECOMMENDED DRIVERS FOR USE WITH MAX. 5 LAMPS: | | |
|---|---|---|
| ABI SET60T-EL 10-60W | ABI SET150-2 5-150W | Aurora AU-LED16T |
| Aurora AU E60 | DELUCE DLT70 10-70W | DELUCE DLT60 10-160W |
| HEP Group TL210S 50-210W | Philips Primaline 105 30-105W | Enlight-SC60 |
| EREA LASSO 150K 35-150W | FN LIGHT TL210S 50-210W | FN LIGHT TL150S 50-210W |
| VS TopLine EST 105/12.644 20-105W | | |

# Logistic data

| PRODUCT CODE | DESCRIPTION | EAN/ITF CODE | PACKAGING TYPE | SIZE OF PACKAGING (L x H x W) | GROSS WEIGHT |
|---|---|---|---|---|---|
| LDREU001A27MA0 | E-CORE AR111 50W 2700 K / 24° | 4974550474030 | Gift box (1 pce) | 122 x 69 x 123 mm | 295 g |
| | | 24974550474034 | Carton (10 pcs) / MOQ* | 352 x 250 x 133 mm | 3,175 g |
| | | 14974550474037 | Carton (20 pcs) | 363 x 261 x 285 mm | 6,795 g |
| LDREU001A27WA0 | E-CORE AR111 50W 2700 K / 40° | 4974550474047 | Gift box (1 pce) | 122 x 69 x 123 mm | 295 g |
| | | 24974550474041 | Carton (10 pcs) / MOQ* | 352 x 250 x 133 mm | 3,175 g |
| | | 14974550474044 | Carton (20 pcs) | 363 x 261 x 285 mm | 6,795 g |
| LDREU001A30MA0 | E-CORE AR111 50W 3000 K / 24° | 4974550474054 | Gift box (1 pce) | 122 x 69 x 123 mm | 295 g |
| | | 24974550474058 | Carton (10 pcs) / MOQ* | 352 x 250 x 133 mm | 3,175 g |
| | | 14974550474051 | Carton (20 pcs) | 363 x 261 x 285 mm | 6,795 g |
| LDREU001A30WA0 | E-CORE AR111 50W 3000 K / 40° | 4974550474061 | Gift box (1 pce) | 122 x 69 x 123 mm | 295 g |
| | | 24974550474065 | Carton (10 pcs) / MOQ* | 352 x 250 x 133 mm | 3,175 g |
| | | 14974550474068 | Carton (20 pcs) | 363 x 261 x 285 mm | 6,795 g |
| LDREU001A40MA0 | E-CORE AR111 50W 4000 K / 24° | 4974550474078 | Gift box (1 pce) | 122 x 69 x 123 mm | 295 g |
| | | 24974550474072 | Carton (10 pcs) / MOQ* | 352 x 250 x 133 mm | 3,175 g |
| | | 14974550474075 | Carton (20 pcs) | 363 x 261 x 285 mm | 6,795 g |
| LDREU001A40WA0 | E-CORE AR111 50W 4000 K / 40° | 4974550474085 | Gift box (1 pce) | 122 x 69 x 123 mm | 295 g |
| | | 24974550474089 | Carton (10 pcs) / MOQ* | 352 x 250 x 133 mm | 3,175 g |
| | | 14974550474082 | Carton (20 pcs) | 363 x 261 x 285 mm | 6,795 g |
| LDREU002A27NA0 | E-CORE AR111 75W 2700 K / 8° | 4974550474092 | Gift box (1 pce) | 122 x 69 x 123 mm | 305 g |
| | | 24974550474096 | Carton (10 pcs) / MOQ* | 352 x 250 x 133 mm | 3,279 g |
| | | 14974550474099 | Carton (20 pcs) | 363 x 261 x 285 mm | 7,003 g |
| LDREU002A27MA0 | E-CORE AR111 75W 2700 K / 24° | 4974550474108 | Gift box (1 pce) | 122 x 69 x 123 mm | 305 g |
| | | 24974550474102 | Carton (10 pcs) / MOQ* | 352 x 250 x 133 mm | 3,279 g |
| | | 14974550474105 | Carton (20 pcs) | 363 x 261 x 285 mm | 7,003 g |
| LDREU002A27WA0 | E-CORE AR111 75W 2700 K / 40° | 4974550474115 | Gift box (1 pce) | 122 x 69 x 123 mm | 305 g |
| | | 24974550474119 | Carton (10 pcs) / MOQ* | 352 x 250 x 133 mm | 3,279 g |
| | | 14974550474112 | Carton (20 pcs) | 363 x 261 x 285 mm | 7,003 g |
| LDREU002A30NA0 | E-CORE AR111 75W 3000 K / 8° | 4974550474146 | Gift box (1 pce) | 122 x 69 x 123 mm | 305 g |
| | | 24974550474140 | Carton (10 pcs) / MOQ* | 352 x 250 x 133 mm | 3,279 g |
| | | 14974550474143 | Carton (20 pcs) | 363 x 261 x 285 mm | 7,003 g |
| LDREU002A30MA0 | E-CORE AR111 75W 3000 K / 24° | 4974550474122 | Gift box (1 pce) | 122 x 69 x 123 mm | 305 g |
| | | 24974550474126 | Carton (10 pcs) / MOQ* | 352 x 250 x 133 mm | 3,279 g |
| | | 14974550474129 | Carton (20 pcs) | 363 x 261 x 285 mm | 7,003 g |
| LDREU002A30WA0 | E-CORE AR111 75W 3000 K / 40° | 4974550474139 | Gift box (1 pce) | 122 x 69 x 123 mm | 305 g |
| | | 24974550474133 | Carton (10 pcs) / MOQ* | 352 x 250 x 133 mm | 3,279 g |
| | | 14974550474136 | Carton (20 pcs) | 363 x 261 x 285 mm | 7,003 g |
| LDREU002A40NA0 | E-CORE AR111 75W 4000 K / 8° | 4974550474153 | Gift box (1 pce) | 122 x 69 x 123 mm | 305 g |
| | | 24974550474157 | Carton (10 pcs) / MOQ* | 352 x 250 x 133 mm | 3,279 g |
| | | 14974550474150 | Carton (20 pcs) | 363 x 261 x 285 mm | 7,003 g |
| LDREU002A40MA0 | E-CORE AR111 75W 4000 K / 24° | 4974550474160 | Gift box (1 pce) | 122 x 69 x 123 mm | 305 g |
| | | 24974550474164 | Carton (10 pcs) / MOQ* | 352 x 250 x 133 mm | 3,279 g |
| | | 14974550474167 | Carton (20 pcs) | 363 x 261 x 285 mm | 7,003 g |
| LDREU002A40WA0 | E-CORE AR111 75W 4000 K / 40° | 4974550474177 | Gift box (1 pce) | 122 x 69 x 123 mm | 305 g |
| | | 24974550474171 | Carton (10 pcs) / MOQ* | 352 x 250 x 133 mm | 3,279 g |
| | | 14974550474174 | Carton (20 pcs) | 363 x 261 x 285 mm | 7,003 g |

* MOQ = minimum order quantity

# Handling and safety information

- Do not cover the lamp with paper, cloth or other easily flammable materials
- Do not expose the lamp to water or high humidity
- Avoid additional mechanical stress on the lamp
- Do not touch the lamp during or shortly after usage. Risk of burn!
- Use only with recommended drivers
- Ambient temperature range: +5 °C to +40 °C
- Do not look directly into the lamp
- Do not spray pesticide on this lamp
- Please ensure the mains power is disconnected before undertaking any work on the luminaire or lamp

## www.toshiba.eu/lighting

10/2014

Product specifications and configurations, and availability of products are subject to change. Variations in product design and product features are subject to change. Colours may vary from illustration. Errors and omissions excepted.
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